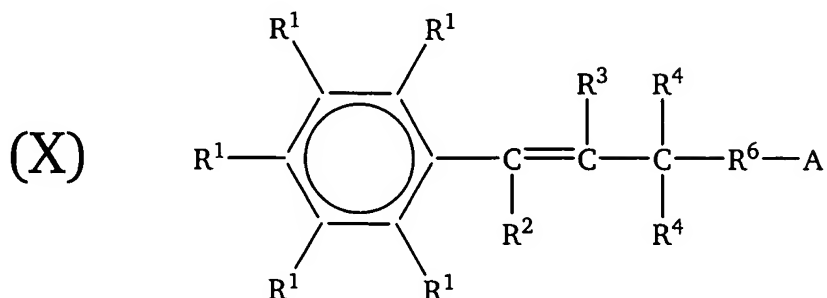


Claims:

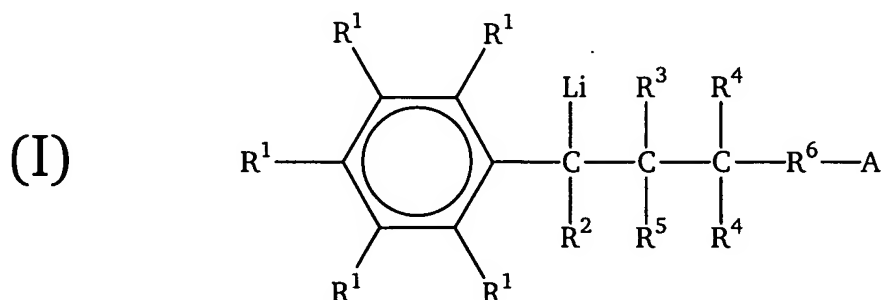
1. (Currently Amended) A process for preparing a functionalized anionic polymerization initiator, the process comprising:

combining a functionalized styryl compound and an organolithium compound, where the functionalized styryl compound is defined by the formula X



where each R<sup>1</sup> is independently hydrogen or a hydrocarbyl group, R<sup>2</sup> is hydrogen or a hydrocarbyl group, R<sup>3</sup> is hydrogen or a hydrocarbyl group, each R<sup>4</sup> is independently hydrogen or a monovalent organic group, R<sup>6</sup> is a covalent bond or a hydrocarbylene group, and A is a functional group.

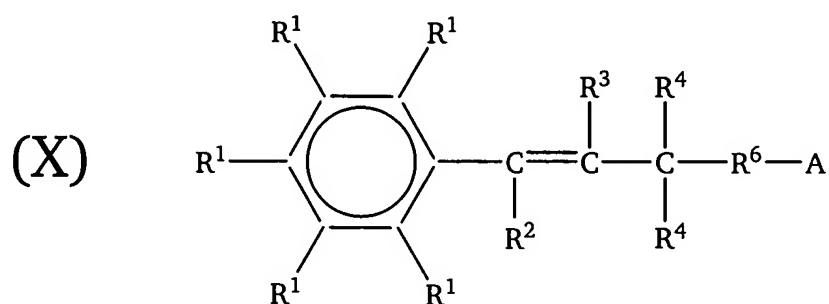
2. (Original) An anionic polymerization initiator defined according to the formula I:



where each R<sup>1</sup> is independently hydrogen or a hydrocarbyl group, R<sup>2</sup> is hydrogen or a hydrocarbyl group, R<sup>3</sup> is hydrogen or a hydrocarbyl group, each R<sup>4</sup> is independently

hydrogen or a monovalent organic group,  $R^5$  is a hydrogen atom or a hydrocarbyl group, where at least one of  $R^3$  or  $R^5$  is hydrocarbyl,  $R^6$  is a covalent bond or a hydrocarbylene group, and A is a functional group.

3. (Currently Amended) A polymer prepared by a process of comprising the steps of:  
 polymerizing monomer with an initiator that is prepared by combining a functionalized styryl compound and an organolithium compound, where the functionalized styryl compound is defined by the formula X



where each  $R^1$  is independently hydrogen or a hydrocarbyl group,  $R^2$  is hydrogen or a hydrocarbyl group,  $R^3$  is hydrogen or a hydrocarbyl group, each  $R^4$  is independently hydrogen or a monovalent organic group,  $R^6$  is a covalent bond or a hydrocarbylene group, and A is a functional group.

4. (cancelled)

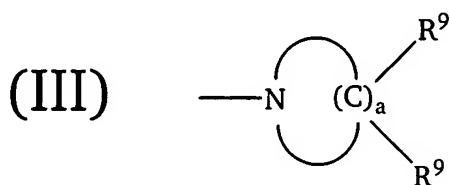
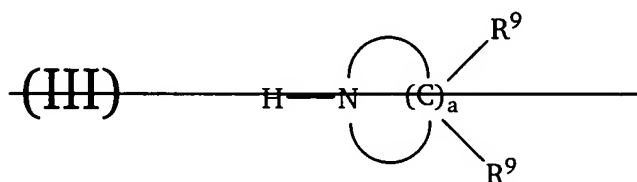
5. (Currently Amended) The process of claim 1, where the functionalized styryl compound is N-(cinnamyl): -pyrrolidine, -3-methylpyrrolidine, -3,4-dimethylpyrrolidene, -3,3-dimethylpyrrolidine, -piperidine, -4-methylpiperidine, -3-methylpiperidine, -morpholine, -4-methylpiperazine, -4-ethylpiperazine, -4-propylpiperazine, -hexamethyleneimine (or ~~perhydroazepine~~), -trimethylperhydroazepine, -azacyclotridecane, -azacyclohexadecane, -azacycloheptadecene,

-trimethylazabicyclooctane, [[or]] -perhydroisoquinoline, or -perhydroindole.

6. (Currently Amended) The process of claim 1, where said step of combining combines about 0.8 mmol of the ~~cyclic-amine~~ functionalized styryl compound with about 1.0 mmol of the organolithium compound.

7. (Previously presented) The process of claim 1, where step of combining occurs in the presence of about 1 to about 20 mmol of monomer in order to chain extend the initiator.

8. (Currently Amended) The process of claim 1, where the ~~cyclic-amine-compound~~ functional group A is defined by the formula III



where each  $\text{R}^9$  is independently hydrogen or a monovalent organic group and  $a$  is an integer from 4 to about 18.

9. (Previously Presented) The process of claim 1, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized nucleophile.

10. (Currently Amended) The process of claim 1, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized ~~electrophile~~ electrophile.

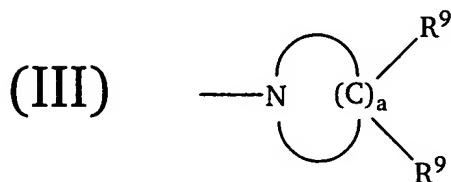
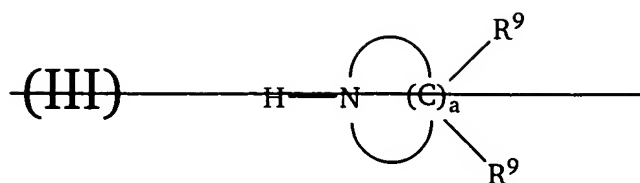
11. (Cancelled)

12. (Currently Amended) The polymer of claim 3, where the functionalized styryl compound is N-(cinnamyl): -pyrrolidine, -3-methylpyrrolidine, -3,4-dimethylpyrrolidene, -3,3-dimethylpyrrolidine, -piperidine, -4-methylpiperidine, -3-methylpiperidine, -morpholine, -4-methylpiperazine, -4-ethyl-piperazine, -4-propylpiperazine, -hexamethyleneimine ~~(or—perhydroazepine)~~, -trimethylperhydroazepine, -azacyclotridecane, -azacyclohexadecane, -azacycloheptadecene, -trimethylazabicyclooctane, [[or]] -perhydroisoquinoline, or -perhydroindole.

13. (Currently Amended) The polymer of claim 3, where said step of combining combines about 0.8 mmol of the ~~cyclic-amine~~ functionalized styryl compound with about 1.0 mmol of the organolithium compound.

14. (Previously Presented) The polymer of claim 3, where step of combining occurs in the presence of about 1 to about 20 mmol of monomer in order to chain extend the initiator.

15. (Currently Amended) The polymer of claim 3, where the ~~cyclic-amine compound~~ functional group A is defined by the formula III



where each R<sup>9</sup> is independently hydrogen or a monovalent organic group and a is an integer from 4 to about 18.

16. (Previously Presented) The polymer of claim 3, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized nucleophile.

17. (Currently Amended) The polymer of claim 3, where the functionalized styryl compound is prepared by combining a reactive styryl compound and a functionalized ~~electrophile~~ electrophile.

18. (New) A process for preparing a functionalized anionic polymerization initiator, the process comprising:

combining a functionalized styryl compound and an organolithium compound, where the functionalized styryl compounds includes a functional group selected from the group consisting of an amine group, a phosphine group, an ether group, a thio ether group, a seleno group, a silyl group, an alkyl tin group, and a short-chain thermoplastic polymer segment.

19. (New) The process of claim 19, where the functional group is selected from the group consisting of an amine group, a phosphine group, an ether group, a thio ether group, a seleno group, a silyl group, and an alkyl tin group.

20. (New) The process of claim 19, where the functional group is selected from the group consisting of an amine group, a phosphine group, a silyl group, and an alkyl tin group.

21. (New) A process for preparing a functionalized anionic polymerization initiator, the process comprising:

combining a functionalized styryl compound and an organolithium compound, where the functionalized styryl compound is N-(cinnamyl): -pyrrolidine, -3-methylpyrrolidine, -3,4-dimethylpyrrolidine, -3,3-dimethylpyrrolidine, -piperidine, -4-methylpiperidine, -3-methylpiperidine, -morpholine, -4-methylpiperazine, -4-ethyl-piperazine, -4-propylpiperazine, -hexamethyleneimine, -trimethylperhydroazepine, -azacyclotridecane, -azacyclohexadecane, -azacycloheptadecene, -trimethylazabicyclooctane, -perhydroisoquinoline, or -perhydroindole.